MEMORANDUM TO: Luis A. Reyes

**Executive Director for Operations** 

THRU: J. E. Dyer, Director /RA/

Office of Nuclear Reactor Regulation

FROM: Samuel J. Collins /RA/

Regional Administrator

Region I

SUBJECT: DEVIATION TO THE ACTION MATRIX TO PROVIDE HEIGHTENED

NRC OVERSIGHT OF THE SALEM AND HOPE CREEK UNITS

This memorandum requests your approval to deviate from the Reactor Oversight Process (ROP) Action Matrix for the Salem and Hope Creek units to provide heightened NRC oversight throughout calendar year 2004 (ROP5) and through the Mid-Cycle Assessment in 2005 (ROP6). This action is needed to closely monitor the licensee's actions to address significant issues associated with safety conscious work environment (SCWE). We will reevaluate any needed actions during the Mid-Cycle Assessment. For Salem and Hope Creek, we have been taking actions consistent with each units' overall assessment category (i.e., the licensee or regulatory response column of the Action Matrix). The actions we propose in this memorandum are planned for Salem and Hope Creek over the next year and represent a customized approach that considers factors beyond each unit's Action Matrix categorization. This approach, albeit requiring your specific approval, is consistent with underlying concepts of Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," and with Commission guidance stated in the Staff Requirements Memorandum (SRM) for SECY-98-176 that specifies that significant concerns related to SCWE at nuclear plants should be treated on a case-by-case basis.

### Background

The NRC policy statement of May 14, 1996, set forth the Commission's expectation that each licensee will ensure a SCWE where employees are encouraged to raise concerns and where such concerns are promptly reviewed, given the proper priority based on their potential safety significance, and appropriately resolved with timely feedback to employees. After considering options for assessing a licensee's SCWE, the Commission issued a staff requirements memorandum (SRM) on September 1, 1998, which directed the staff to address SCWE issues and concerns on a case-by-case basis.

In late 2003, we initiated a special review of the environment for raising and addressing safety issues at the Salem and Hope Creek units. We undertook the review in light of information received in various allegations and inspections as well as NRC management insights related to the SCWE over the past few years. While we have yet to identify any serious safety violations,

collectively, information gathered has led to concerns about the work environment, particularly as it relates to the handling of emergent equipment issues and associated operational decision-making. Concerns regarding PSEG's ability to effectively address potential safety issues had been previously documented in inspection reports and periodic assessment letters. For example, a substantive cross cutting issue in the area of problem identification and resolution was initially identified based on inspections conducted in 2002 and has continued for three more assessment periods including the most recent Mid-Cycle Assessment period.

On January 28, 2004, NRC Region I issued a letter to PSEG that provided interim results of our special review. This review had included numerous interviews of current and former Salem/Hope Creek employees, at various levels of the organization up to and including nuclear executives. Our interviews sought to understand the extent to which a SCWE existed at the station. During our review, we accumulated information about a number of events which, to varying degrees, called into question PSEG management's openness to concerns and alternative views, strength of communications, and effectiveness of the station's corrective action and feedback processes.

In response to our January 28, 2004, letter, PSEG committed to provide significant financial resources to improve station performance and discussed their plans to assess the work environment in their February 13, and February 27, 2004, letters, respectively. In a March 18, 2004, management meeting. PSEG provided the preliminary results of three major assessments of the work environment at the station and subsequently communicated the results in a letter dated May 21, 2004. These assessments included: (1) a safety culture survey conducted by Synergy Corporation in December 2003; (2) a safety culture assessment conducted by the Utility Service Alliance (USA) in March 2004 to evaluate the Salem and Hope Creek safety culture against standards of excellence; and (3) an in-depth evaluation of the work environment for raising and addressing safety issues conducted by an Independent Assessment Team (IAT) between February and April 2004. This last assessment was in direct response to the interim findings documented in our January 28, 2004, letter. The reports of these assessments are available on the NRC Web Site at www.nrc.gov/reading-rm/adams.html using accession number ML040610856. The assessments identified the need for improvement of the work environment and equipment reliability. These assessments also identified that better implementation of station processes, such as corrective actions and work management, were important to achieving equipment improvements. Subsequently, PSEG managers discussed their plans to address SCWE issues in a June 16, 2004, management meeting with the NRC staff and in a letter dated June 25, 2004, in which they indicated the general methods they intended to use to improve the work environment at the station.

On July 30, 2004, NRC Region I issued a letter to PSEG that provided the final results of our special review. This in-depth review confirmed our interim results and generally agreed with the results of PSEG's self-assessments. Specifically, we did not identify any serious safety violations; however, we concluded that there were numerous indications of weaknesses in corrective actions and management efforts to establish an environment where employees are consistently willing to raise safety concerns. Some PSEG staff and managers felt that the company had emphasized production to a point which negatively impacted the handling of emergent equipment issues and associated operational decision-making. Additionally, management has not been consistent in its support of station staff identifying concerns and providing alternate views. We found examples of unresolved conflict and poor communication between management and staff, as well as underlying staff and management frustration with

poor equipment reliability. The equipment issues stemmed, in part, from weaknesses in implementation of station processes such as work management and corrective action. As of July 30, 2004, the NRC staff was continuing to review certain discrete issues and events to establish whether violations of regulatory requirements, beyond those already identified in NRC reports and correspondence, occurred.

## **Deviation Basis**

Although there is no prescriptive guidance on the SCWE, the Commission, in a May 14, 1996 policy statement, acknowledged that a strong SCWE is necessary at nuclear power plants and provided a number of issues for the staff to consider when assessing SCWE issues. Because of its importance, the Commission also recommended that SCWE issues be addressed on a case-by-case basis.

Overall, performance at the Salem and Hope Creek Units has been inconsistent, with frequent challenges to plant operation from equipment and human performance issues. These frequent, and occasionally repetitive, challenges have contributed to plant staff's negative perception of PSEG management's willingness to address these performance issues. These and other factors have contributed to concerns about the SCWE at the stations.

While PSEG has begun initial efforts to address work environment problems by developing action plans in response to the three aforementioned assessments, the NRC staff believes that the situation at the Salem and Hope Creek units warrants close NRC oversight. The staff considers this approach to be consistent with Commission policy.

The ROP Action Matrix includes a range of licensee and NRC actions for each column of the Matrix. However, as discussed in Inspection Manual Chapter 0305, there may be instances in which the actions prescribed by the Action Matrix may not be appropriate. In the case of Salem and Hope Creek, the actions associated with the Regulatory Response Column (the highest column for any of the three units) do not provide the level of oversight needed to appropriately monitor licensee implementation of SCWE initiatives. Therefore, Region I believes that continued heightened oversight as discussed in the following sections should be undertaken at a level of effort above that of the Regulatory Response Column for the Salem and Hope Creek units throughout 2004 (ROP5) and through the Mid-Cycle Assessment in 2005 (ROP6).

# **Planned Actions**

## Requested Deviation

The region requests your approval to deviate from the ROP Action Matrix to provide the following oversight for Salem and Hope Creek throughout calendar year 2004 and through the Mid-Cycle Assessment in 2005. As discussed above, the NRC is considering the following actions to closely monitor PSEG's improvement efforts.

 Conduct periodic management meetings and site visits focused on reviewing results of licensee improvement initiatives, such as efforts to improve work management and corrective actions. Increase the frequency of senior management involvement in meetings, site visits, and correspondence. This would include Regional Administrator involvement in the End-of-Cycle Meeting and, potentially, other periodic meetings and site visits.

- Use an internal NRC coordination team, involving regional and headquarters
  experts in reactor oversight and in SCWE and related performance attributes, to
  help coordinate NRC review efforts. The team would assist in focusing NRC
  staff resources for the evaluation of licensee self-assessment efforts, including
  providing a periodic review of PSEG SCWE performance indicators. The team
  would also be responsible for implementation of communication plans for
  significant NRC actions.
- Review detailed SCWE improvement plans being developed by PSEG to identify SCWE and related performance attributes. Additional NRC actions/inspections would be proposed to review these performance attributes. After consultation with NRR, final actions/inspections would be developed.
- Enhance existing ROP baseline inspections, by adjusting inspection scope, to verify the effectiveness of licensee improvement efforts for SCWE and related performance attributes. For example, we may supplement the Salem Problem Identification and Resolution (PI&R) inspection team, which currently plans to inspect in February 2005, with one to three additional inspectors to review sitewide performance issues. Expand the breadth and depth of PI&R sample inspections to understand initial licensee response to new events and issues, including the extent to which the new information reflects improved or declining performance in this substantive cross cutting area.
- Return to normal NRC monitoring efforts consistent with the Action Matrix, if and when: licensee self-assessment has concluded that substantial, sustainable progress has been made, and NRC has completed a review, the results of which confirm the licensee's assessment results.

#### Continued Actions within the ROP

We also plan to continue the following actions, in accordance with the ROP, to provide appropriate oversight of Salem and Hope Creek. These actions, although not requiring approval as a deviation, are included for your information.

- Continue a focus within baseline inspections on the corrective action and work management programs, including review of equipment reliability issues.
- Maintain the Salem and Hope Creek Resident Inspector staffing in a manner consistent with ensuring an adequate level of on-site inspection.
- Conduct the planned Salem and Hope Creek PI&R team inspections as scheduled in early and late 2005, respectively.

Consistent with the SRM dated May 27, 2004, a copy of this deviation memorandum will be provided to the Commission and the deviation will be discussed at the next Agency Action

Review Meeting. Pending your approval, the NRC staff will develop a communication approach to ensure that the licensee and stakeholders are appropriately informed.

Approval: \_\_/RA/ on August 23, 2004\_ Luis A. Reyes

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